

Using Daneizo with REAL SQL Server

Easy-to-use lending and asset management.
Scalable to multiple users in minutes.

IntelliScanner Corporation
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Using Daneizo with REAL SQL Server Installation

Daneizo is an easy-to-use lending and asset management system for business and education users. It can be used on a single computer by creating library databases on the computer's hard drive. It can also be used with multiple computers by hosting the library databases on a server computer running the REAL SQL Server software. Other computers running Daneizo connect to the server computer over a local network or the Internet.

This chapter explains the process of installing the REAL SQL Server software and configuring it for use with Daneizo. It is assumed that the Daneizo software and IntelliScanner barcode reader hardware have already been installed.

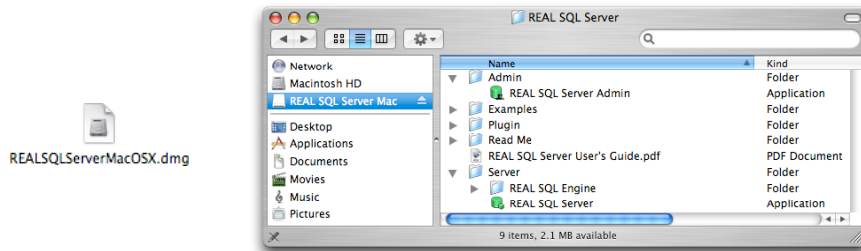
Download

Download the REAL SQL Server software from our web site at the following address. The software is available for Mac OS X and Windows; download the version corresponding to the operating system used on the server computer.

<http://www.intelliscanner.com/producs/daneizo/serverdownload.html>

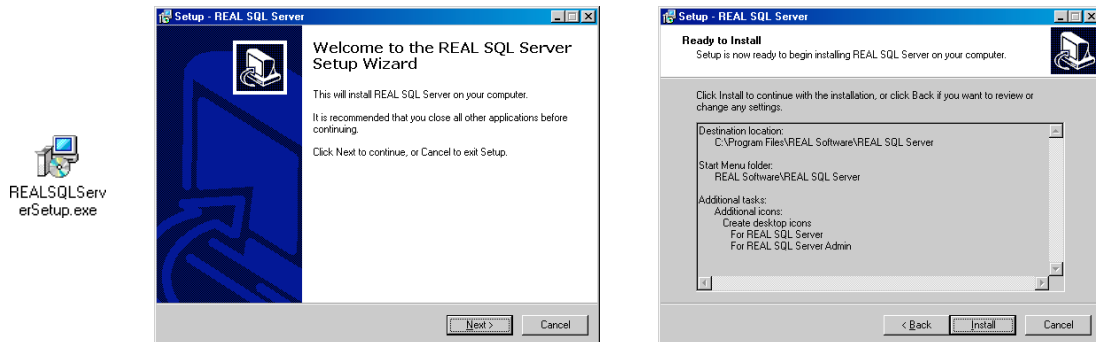
Installation (Mac OS X)

The server download for Mac OS X is a disk image. Double-click the disk image to mount it, then copy its contents to the computer's hard drive; some common locations are the Applications folder and the Desktop folder. The contents include a "REAL SQL Server" folder, which contains the *REAL SQL Server* and *REAL SQL Server Admin* applications used to control and administer the server.



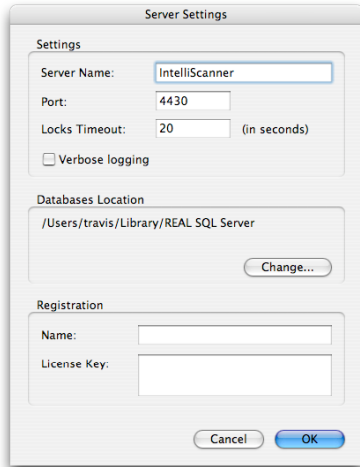
Installation (Windows)

The server download for Windows is an installer executable. Double-click the file to run the Setup program, then follow the on-screen instructions. Shortcuts to the *REAL SQL Server* and *REAL SQL Server Admin* applications, used to control and administer the server, will be added to the Start Menu and optionally to the desktop.



Starting the Server

Open the *REAL SQL Server* application. The first time the application is opened it will prompt for its settings and license information. Fill in the settings and click OK to continue.



Server Name	A name given to the server.
Port	The port the server will listen on. This value must be entered into Daneizo when connecting to the server. The default is 4430.
Locks Timeout	Daneizo locks records while it is modifying them to prevent another Daneizo client from modifying the same record at the same time. If a lock is not released due to a system crash, power failure, loss of network connectivity, et cetera, the lock will automatically be released after this number of seconds. The default value of 20 seconds is recommended.
Verbose Logging	The server logs more information when Verbose Logging is on. It is recommended that this be left off unless it is needed for troubleshooting.
Databases Location	The folder where the database files are stored. It is recommended that this be left at its default path.
Registration	The <i>REAL SQL Server</i> license information.

REAL SQL Server is not a server; it is a front-end interface to a server daemon process that runs in the background. The main window in *REAL SQL Server* shows the status of the server daemon. The Launch Server/Quit Server button is used to start and stop the server daemon. If the server is not running, click the Launch Server button. Closing the main window will exit the *REAL SQL Server* front-end but will not stop the server daemon.



Running / Not Running	The status of the server daemon. The server must be running for Daneizo to access its databases.
Server Name	The name given to the server in the server settings.
Server Address	The IP address of the server computer. This must be entered into Daneizo when connecting to the server.
Server Port	The port on which the server is listening for connections. This must be entered into Daneizo when connecting to the server.
Server License	The status of the server license. The server must be licensed to remove its access limitations.
Settings	Open the Server Settings dialog.
Quit Server	Quit the server daemon. The <i>REAL SQL Server</i> front-end will continue to run.

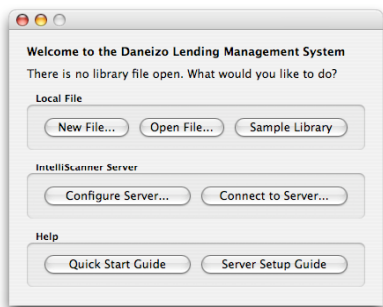
The server daemon is automatically started when *REAL SQL Server* is launched. To have the server daemon automatically start when the server computer is booted, configure the computer's operating system to open *REAL SQL Server* at login/startup time.

Important Note: Firewall software may prevent Daneizo from connecting to the server. If the server computer has a firewall it must be configured to allow incoming connections on the port specified in the Server Settings window. The Mac OS X firewall can be configured in the Sharing section of System Preferences. The Windows firewall can be configured in the Network and Internet Connections: Windows Firewall control panel.

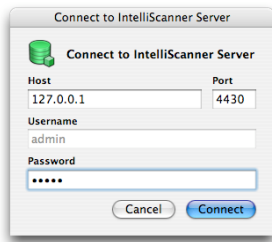
REAL SQL Server Configuration

Creating a Database & Configuring Access

Open Daneizo and close any open library databases.

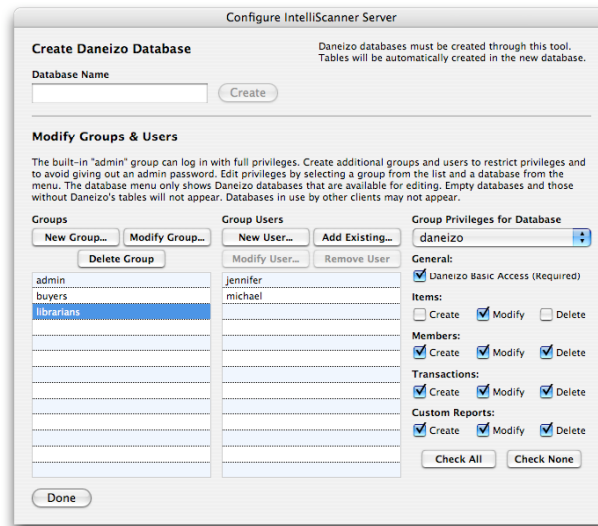


Click the Configure Server button. A window will open prompting for the connection and login information for the server. When configuring the server, one must log in using the built-in “admin” account. The default password is “admin”.



Host	The host is the IP address of the server computer. This can be found in <i>REAL SQL Server</i> . If Daneizo is running on the same computer as the server software, enter “127.0.0.1”.
Port	The port on which the server is listening for connections. This can be found and changed in <i>REAL SQL Server</i> . The default is 4430.
Username	The username must be “admin.”
Password	The password for the “admin” user. This can be changed using <i>REAL SQL Server Admin</i> . The default is “admin”.

The Configure REAL SQL Server window opens upon a successful log in. To begin, create a new database by entering a database name and clicking the Create button. A good database name choice is “daneizo_libraryname” with no spaces and with “libraryname” replaced with the name of the lending library. Note the database name as it must be entered into Daneizo later and can be case-sensitive.



In order to connect to a database on the server, one must enter his or her username and password. It is possible to log in using the built-in “admin” account though this represents a security risk and should be avoided.

REAL SQL Server uses a users and groups authentication system. A user represents a single person and consists of a unique username and a password. A group represents a user classification and consists of the privileges given to the type of user. For example, a library might create a “buyers” group and a “librarian” group. The “buyers” group is given full access to item records but no modification access to members or transactions. The “librarian” group is given full access to members and transactions but cannot create or delete items. Users are created and assigned to a group to give them access to the database. It is possible to assign multiple groups to the same user; the user will have the combined privileges of his or her groups. To assign unique privileges to a user, create a separate group (e.g. a “michael” group containing the “michael” user).

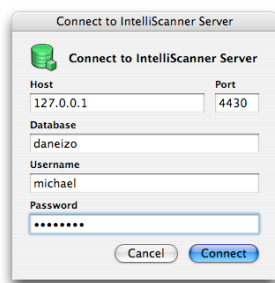
To create a new group, click the “New Group” button and enter a group name. To create a new user and assign him or her to a group, select a group, click the “New User” button, and enter a username and password. To add an existing user to a group, select the group, click the “Add Existing” button, and select the user to add.

Groups are created with no privileges; users in newly created groups cannot log in. To assign privileges to a group, select the group from the groups list and a database from the database menu, then use the checkboxes to adjust the privileges. If a database on the server is not listed in the database menu then it is either not a Daneizo database or another user is connected to it. “Daneizo Basic Access” is required for all Daneizo users. “Create” is the ability to create new records, “Modify” is the ability to modify existing records, and “Delete” is the ability to delete records. Advanced users may wish to further customize group permissions and can do so with *REAL SQL Server Admin*.

Click the “Done” button when finished to return to the main menu.

Connecting

Click the Connect to Server button in Daneizo’s main menu. A window will open prompting for the connection and login information for the server.



Host	The host is the IP address of the server computer. This can be found in <i>REAL SQL Server</i> . If Daneizo is running on the same computer as the server software, enter “127.0.0.1”.
Port	The port on which the server is listening for connections. This can be found and changed in <i>REAL SQL Server</i> . The default is 4430.
Username	The username of the user logging in.
Password	The password of the user logging in.

Click the Connect button to connect to the database on the server. If an error occurs, check the following items.

- Is the server daemon running?
- Is there any firewall software on the server that is preventing incoming connections?
- Is the network properly set up? Does the server computer respond to pings?
- Are the host, port, username, and password fields entered correctly?
- Is the database name entered correctly? It is case-sensitive and must be entered exactly.

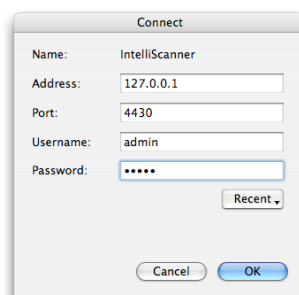
REAL SQL Server Advanced Administration

REAL SQL Server Admin

REAL SQL Server Admin can be used to perform many advanced server functions, including:

- Changing the password for the “admin” user
- Uploading Daneizo databases to the server
- Deleting databases
- Setting up an automatic database backup schedule
- Manually editing group permissions
- Viewing the server log

Open *REAL SQL Server Admin* and enter the server host and port, and the “admin” user login.



Changing the Admin Password

- Connect to the server using *REAL SQL Server Admin*
- Switch to the Users tab
- Click the “admin” user, then click the Modify button
- Enter a new password

Uploading a Database

Library databases created with single-user copies of Daneizo can be uploaded to the server to make them accessible from multiple computers.

- Connect to the server using *REAL SQL Server Admin*
- Switch to the Databases tab
- Choose “Upload Database” from the Database menu
- Select a Daneizo database to upload to the server

Important Note: Databases created with pre-2.0 versions of Daneizo must be updated to a newer database format before they can be uploaded to the server. Daneizo 2.0 or later will offer to update older databases to the newer format upon opening them.

Deleting a Database

- Connect to the server using *REAL SQL Server Admin*
- Switch to the Databases tab
- Select the database to be deleted
- Click the Delete button

Automatic Database Backup

The server can be configured to automatically create backup copies of its databases. It is strongly recommended that this feature be used in addition to a regular full backup to protect against accidental database changes and hardware failure.

- Connect to the server using *REAL SQL Server Admin*
- Switch to the Databases tab
- Select the database to be backed up
- Choose “Backups” from the Database menu
- Specify the backup schedule

